

## MEMORANDUM

TO: Vermont Children's Performance Indicator Project Advisory Group

FROM: John Pandiani  
Brad James  
Fred Ober

DATE: October 2, 1997

RE: Caseload Segregation-Integration for CMH, SRS, and EBD Special Education,  
FY1996

This week's report is the sixth in a series focusing on caseload overlap among community mental health, special education/EBD, and SRS caseloads. The analysis this week provides a composite measure of the shared caseload among these three service sectors for each of Vermont's ten community mental health service areas. We have calculated this ratio for both the one month overlap window and the one year overlap window as we discussed last week.

As you review these data on caseload overlap, we will be particularly interested in your comments on the appropriateness of the analysis, the effectiveness of the presentation of these data, and your interpretation of the results.

## **Caseload Segregation-Integration for CMH, SRS, and EBD Special Education, FY1996**

**QUESTION:** Does the relative amount of Community Mental Health, SRS, and EBD Special Education caseload segregation (the degree to which these programs serve different children and adolescents) and integration (the degree to which these programs serve the same children and adolescents) vary among regions in Vermont?

**DATA:** Data on children and adolescents under 22 years of age who were served by Children's Services Programs at CMHCs in Vermont during December 1995 and FY1996 were obtained from the Quarterly Service Reports provided to the Department of Developmental and Mental Health Services (DDMHS) by the community service providers. Data items used in this analysis include program and provider codes, client date of birth, and gender. The QSR includes a provider specific person identification number but does not include a statewide unique person identifier.

Data files describing all children and adolescents who were on SRS caseload during December 1995 and FY1996 were obtained from SRS. Data items used in this analysis include student date of birth, gender, and disability code. The SRS database extract does not include a unique person identifier.

Data files describing all children and adolescents, who were on IEPs as of December 1, 1995 and December 1, 1996 were obtained from the Vermont Department of Education. These data were collected as part of the 1995 and 1996 *Child Count Data* projects. Data items used in this analysis include student date of birth, gender, and disability code. The Child Count Data Set does not include a unique person identifier although each record is a unique individual. Thirty-four children and adolescents for December 1995 and thirty-nine children and adolescents in December 1996 were excluded from the analysis for community mental health service areas because they were out-of-state, in correctional facilities, parochial schools, or home tutoring and could not be assigned to a community mental health service area. These children and adolescents were included for statewide analysis, however.

**ANALYSIS:** Caseload Segregation-Integration Ratios were constructed for each of Vermont's ten community mental health service areas. The values of the ratio vary from zero (0) to one hundred (100), with zero indicating that the caseloads of the three programs are totally segregated and one-hundred indicating that the caseloads are totally integrated. In a totally segregated service system, no child or adolescent would be served by more than one service sector. In a totally integrated service system, every child would be served in every sector if the sectors were all the same size. When the sectors are not the same size in a totally integrated service system, every child and adolescent served by a smaller service sector would also be served by every larger service sector.

Mathematically, a raw segregation-integration ratio is derived by dividing the duplicated number of children and adolescents served (the sum of the numbers served in each sector) by the unduplicated number served. Since no common person identifiers are available across these three service sectors, *Probabilistic Population Estimation* was used to derive unduplicated counts of the number of children and adolescents served.<sup>1</sup> In order to standardize the ratio across regions with different relative caseload sizes, the lowest and highest segregation-integration ratios mathematically possible are determined. The raw segregation-integration ratio is expressed as a percent of the possible range.

The smallest possible segregation-integration ratio (indicating a totally segregated service system) is derived by dividing one (1) by the number of service sectors under examination. The largest possible segregation-integration ratio (indicating a totally integrated system) is derived by dividing the ratio of the total duplicated number of children and adolescents to the number of individuals in the largest sector by the number of sectors.

<sup>1</sup>For more detail see Pandiani JA and Banks SM: A Global Measure of Access to Mental Health Services for a Managed Care Environment. The Journal of Mental Health Administration (24:3) summer, 1997.

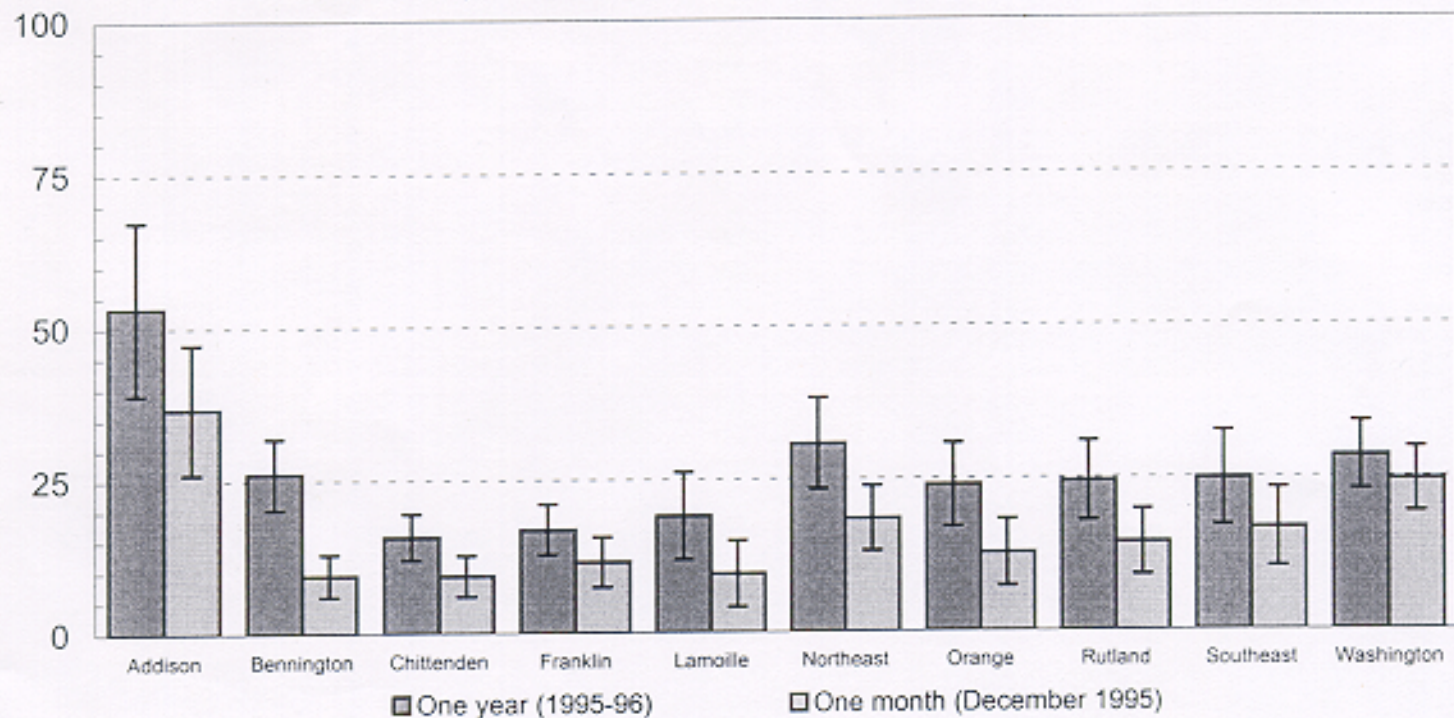
**RESULTS:** Chittenden and Franklin service areas had the most segregated caseloads when viewed through the one-year window, while Chittenden and Bennington had the most segregated caseloads when viewed through the one-month window. The Addison service area had by far the most integrated caseload when viewed through either window.

**NEXT QUESTIONS:** Is the amount of caseload segregation and integration an enduring quality of regions in Vermont, or does it change from year to year? Is the degree of caseload segregation and integration related to treatment outcomes? Is the degree of caseload segregation and integration related to the cost of services in the various regions?



## CASELOAD SEGREGATION-INTEGRATION

CASELOAD SEGREGATION-INTEGRATION RATIO FOR CMH,  
SRS, AND EBD SPECIAL EDUCATION



CMH Region	Caseload Segregation-Integration Ratio	
	One Year (1995-1996) <sup>1</sup>	One Month (December 1995) <sup>2</sup>
Addison	53 ± 14.1	37 ± 10.6
Bennington	26 ± 5.8	9 ± 3.5
Chittenden	16 ± 3.8	9 ± 3.3
Franklin	17 ± 4.2	12 ± 4.1
Lamoille	19 ± 7.1	10 ± 5.4
Northeast	31 ± 7.5	18 ± 5.3
Orange	24 ± 6.9	13 ± 5.5
Rutland	24 ± 6.5	14 ± 5.4
Southeast	25 ± 7.7	17 ± 6.4
Washington	28 ± 5.5	25 ± 5.3

The values of the *Segregation-Integration Ratio* vary from zero (0) to one hundred (100), with zero indicating that the caseloads of the three programs are totally segregated and one hundred indicating that the caseloads are totally integrated. In a totally segregated system, no child or adolescent would be served by more than one service sector. In a totally integrated service system, every child would be served by every sector if the sectors were all the same size. When sectors are not the same size in a totally integrated service system, every child and adolescent served by a smaller sector would also be served by every larger service sector.

<sup>1</sup> For CMH and SRS, all children and adolescents served during FY1996 are included. For EBD Special Education students, all children and adolescents on an EBD/IEP on December 1, 1995 or December 1, 1996.

<sup>2</sup> For CMH and SRS, all children and adolescents served during December 1995 are included. For EBD Special Education students, all children and adolescents on an EBD/IEP on December 1, 1995.